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EXAMINER	
USTARIS, JOSEPH G	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AW

Office Action Summary	Application No.	Applicant(s)	
	09/942,957	PUTHIYEDATH, LEENA K.	
	Examiner	Art Unit	
	Joseph G. Ustaris	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 18-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Radha et al. (US006629318B1).

Regarding claim 1, Radha et al. (Radha) discloses method that "transmits a data stream of data packets having a known arrangement from a stream sender to a stream receiver via a network connection" (See Fig. 1; column 4 lines 4-38), wherein the stream adheres to MPEG4 technology that includes information about the "known arrangement" of the packets. The system is then able to "analyze the transmitted data packets received at the stream receiver to determine whether any missing known data packets in the known data packet arrangement were not transmitted by the network connection to the stream receiver" (See column 4 lines 48-60) and then "requests from the stream sender to retransmit any missing known data packets not received at the stream receiver" (See column 4 lines 48-60). In response, the streaming video transmitter "retransmits any missing known data packets from the stream sender to the stream receiver".

Regarding claim 2, inherently the system compares the received data packets to a "known arrangement of data packets" in order to successfully determine if a packet is missing.

Regarding claim 3, the stream of data packets is stored on a buffer that is split into two sections (See Fig. 4), re-transmission region or "original data buffer" and a too-early for re-transmission request region or "rendered data buffer". The re-transmission region of the buffer "recreates the data packets from the stream sender by integrating the missing known data packets from the retransmission into the data packets" stored within the buffer (See column 10 lines 18-54).

Regarding claim 4, the system is able to place the re-transmitted data packets in the appropriate temporal segments in order to keep the MPEG4 data packets in sequence or "reordering out of sequence data packets" (See column 10 lines 49-54).

Claim 18 contains the limitations of claim 1 (wherein the process is implemented as a program encoded on a computer readable medium (See column 4 line 64 – column 5 line 2)) and is analyzed as previously discussed with respect to that claim.

Claim 19 contains the limitations of claims 2 and 18 and is analyzed as previously discussed with respect to those claims.

Claim 20 contains the limitations of claims 3 and 18 and is analyzed as previously discussed with respect to those claims.

Claim 21 contains the limitations of claims 4 and 20 and is analyzed as previously discussed with respect to those claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-14 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radha et al. (US006629318B1) in view of Yashiro et al. (US005767895A) and Curley et al. (US 20020120727A1).

Claim 5 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. However, Radha does not disclose (1) comparing recreated data packets to data packets stored to from a perceived quality of streaming data score and sending the score to an analyzer and (2) a third party for evaluation purposes.

(1) Yashiro et al. (Yashiro) discloses a system that is able to test the quality of transmission signals within CATV system. The system is able to compare received data with data stored at the receiver in order to obtain an error rate statistic or "perceived quality of streaming data score". The error rate is then transmitted to the network manager or "analyzer" where it will determine what actions are needed to be taken to provide high quality communications (See Fig. 1; column 8 lines 29-59). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the decoder buffer disclosed by Radha to compare recreated data packets within the re-transmission region to data packets stored in the too-early for re-

transmission request region to from a perceived quality of streaming data score and sending the score to an analyzer, as taught by Yashiro, in order to provide a means of tracking and ensuring high quality transmissions between the transmitter and the receiver.

(2) Curley et al. (Curley) discloses a system that measures and monitors network performance between a server and clients. Curley discloses that third parties that offer monitoring services are used to monitor and report the performance of the network (See paragraphs 0007-0009). Therefore, it would have been obvious to one with ordinary skill in the art at the time then invention was made to modify the decoder buffer disclosed by Radha to send the score to a third party for evaluation purposes, as taught by Curley, in order to provide a more cost efficient means of monitoring the performance of the network, transmitters, and receivers.

Regarding claim 6, the buffer "delays transmitting the stored data packets to the device until the missing known data packets are integrated into the data packets stored at the original data buffer" (See Radha Fig. 4; column 10 lines 19-54).

Regarding claim 7, the third party evaluates the performance of the network to provide a report on the service level of the system or "track the Service level agreements" (See Curley paragraphs 0007-0009).

Regarding claim 8, the system uses the error rate statistic to choose a better communication band that provides "sufficient bandwidth to provide acceptable quality of service to the stream receiver" (See Yashiro column 8 lines 29-59).

Claim 9 contains the limitations of claims 1 and 5 and is analyzed as previously discussed with respect to those claims. Furthermore, the system includes a "stream receiver" (See Radha Fig. 1, 130) and a "stream sender" (See Radha Fig.1, 110).

Claim 10 contains the limitations of claims 2 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 11 contains the limitations of claims 3, 6, and 9 and is analyzed as previously discussed with respect to those claims.

Claim 12 contains the limitations of claims 4 and 11 and is analyzed as previously discussed with respect to those claims.

Claim 13 contains the limitations of claims 8 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 14 contains the limitations of claims 7 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 22 contains the limitations of claims 5 and 18 and is analyzed as previously discussed with respect to those claims.

Claim 23 contains the limitations of claims 6 and 22 and is analyzed as previously discussed with respect to those claims.

Claim 24 contains the limitations of claims 7 and 22 and is analyzed as previously discussed with respect to those claims.

Claim 25 contains the limitations of claims 8 and 22 and is analyzed as previously discussed with respect to those claims.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radha et al. (US006629318B1) in view of Yashiro et al. (US005767895A) and Curley et al. (US 20020120727A1) as applied to claims 5-14 and 22-25 above, and further in view of Chen et al. (US006097699A).

Regarding claim 15, Radha in view of Yashiro and Curley does not explicitly disclose (1) a plurality of stream sender locations, a plurality of stream receiver locations, a plurality of third party evaluators, and (2) to form a perceptual quality measurement score for the multiple locations.

(1) Official Notice is taken that it is well known to have a plurality of stream sender locations, a plurality of stream receiver locations, and a plurality of third party evaluators. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify system disclosed by Radha in view of Yashiro and Curley to have a plurality of stream sender locations, a plurality of stream receiver locations, and a plurality of third party evaluators in order to expand the capabilities of the system thereby extended the networks service area.

(2) Chen et al. (Chen) discloses a system for monitoring quality of services over a network. Chen discloses that the system can monitor multiple connections to track the quality of service levels (See Fig. 12; column 10 line 61 – column 11 line 14). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify monitoring services disclosed by Radha in view of Yashiro and Curley to form a perceptual quality measurement score for the multiple locations, as

taught by Chen, in order to provide a more accurate means of monitoring the network by monitoring all communication channels.

Regarding claim 16, Radha in view of Yashiro and Curley and in further view of Chen does not explicitly disclose multicasting.

Official Notice is taken that it is well known to use multicasting method within networks. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the network disclosed by Radha in view of Yashiro and Curley and in further view of Chen to be configured for multicasting in order to provide a more efficient means of communicating data through the network.

Regard claim 17, the system is "configured for conversation with any number (e.g. one) of stream sender locations and stream receiver locations" (See Radha Fig. 1 and Yashiro Fig. 1).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGU
September 8, 2005

VIVEK SRIVASTAVA
PRIMARY EXAMINER